AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. Please amend Claims 39-42 and 44, add Claims 45-50, and cancel Claims 1-10 as follows:

1-34. (Canceled)

35. (Previously Presented) A switching center, comprising:

a plurality of first ports for use in coupling the switching center to a plurality of local user devices;

a plurality of second ports for use in coupling the switching center to a plurality of external transmission media, each of said plurality of external transmission media being coupled at an opposite end to another switching center within the communication network;

a switch for selectively coupling individual first ports to individual second ports within the switching center for use in establishing communication connections between local user devices and remote user devices in the communication network;

a pool of echo cancellation units that are each capable of reducing echoes received by said switching center from an external transmission medium;

a call classifier operable to detect an echo energy level from a first external transmission medium associated with a first communication connection; and

an allocation unit for allocating an echo cancellation unit from said pool of echo cancellation units to the first communication connection being supported by the switching center in response to detection, by the call classifier, of echo energy above a threshold level from a first external transmission medium associated with said communication connection, wherein the first communication connection is between a first local user device and a remote user device.

36. (Previously Presented) The switching center of claim 35, wherein the allocation unit is further operable to terminate allocation of the echo cancellation unit to the first communication connection in response to detection of echo energy, from the first external transmission medium, below the threshold level.

37. (Previously Presented) The switching center of claim 36, wherein the call classifier is further operable to thereafter monitor the first communication connection, while the first local user device and remote user device are coupled to the first external transmission medium, for at least one of echo cancellation activity and echo energy and wherein the allocation unit reallocates an echo cancellation unit from said pool of echo cancellation units to the first communication connection in response to detection, by the call classifier, of echo energy above a threshold level.

38. (Previously Presented) The switching center of Claim 35, wherein the allocation unit is further operable to thereafter monitor the first communication connection, while the first local user device and remote user device are coupled to the first external transmission medium, for at least one of echo cancellation activity and echo energy and discontinue reallocation of the echo cancellation unit to the first communication connection in response to detection of echo energy below a threshold level.

39. (Currently Amended) A method for performing echo cancellation within a switching center of a communication network, said switching center being coupled to a plurality of local user devices and a plurality of external transmission media, said method comprising the steps of:

providing at least one echo cancellation unit and call classifier within said switching center;

coupling a first local user device to a first external transmission medium as part of a communication connection between the first local user device and a remote user device;

the call classifier detecting an echo energy level on the first external transmission medium; and

in response to the call classifier detecting, on the first external transmission medium, an echo energy level ~~on the first external transmission medium rising to a level that is unacceptable~~ exceeding a selected magnitude, performing echo cancellation on the communication connection.

40. (Currently Amended) The method of claim 39, further comprising:

the call classifier thereafter monitoring the first external transmission medium, while the first local user device and remote user device are connected, for echo energy; and

in response to the detected echo energy thereafter ~~falling to a level that is acceptable~~ failing to exceed a selected magnitude during the communication connection between the first local user device and the remote user device, discontinuing echo cancellation of signals on the first external transmission medium.

41. (Currently Amended) The method of claim 40, further comprising:

in response to echo energy on the first external transmission medium, while the first local user device and remote device are connected, again ~~rising to a level that is unacceptable~~ exceeding a selected magnitude during the communication connection between the first local user device and remote user device, again performing echo cancellation on the communication connection between the first local user device and remote user device.

42. (Currently Amended) The method of Claim 21, further comprising:

in response to echo energy on the first external transmission medium ~~falling to a level that is acceptable~~ failing to exceed a selected magnitude during the communication connection between the first local user device and remote user device, again discontinuing echo cancellation of signals on the communication connection between the first local user device and remote user device.

43. (Previously Presented) The method claimed in Claim 39, wherein the at least one echo cancellation unit is a pool of echo cancellation units and further comprising:

allocating a first echo cancellation unit from the pool to the communication connection.

44. (Currently Amended) The method claimed in Claim 39, when the detected echo energy fails to exceed the ~~determined threshold~~ selected magnitude within a predetermined time interval after allocating the call classifier, the call classifier terminates the monitoring step.

45. (New) A computer readable medium comprising processor executable instruction to perform the steps of Claim 39.

46. (New) A switching center, comprising:

a plurality of first ports for use in coupling the switching center to a plurality of local user devices;

a plurality of second ports for use in coupling the switching center to a plurality of external transmission media, each of said plurality of external transmission media being

coupled at an opposite end to another switching center within the communication network;

a switch for selectively coupling individual first ports to individual second ports within the switching center for use in establishing communication connections between local user devices and remote user devices in the communication network;

at least one echo cancellation unit that is capable of reducing echoes received by said switching center from an external transmission medium;

a call classification means for detecting an echo energy level from a first external transmission medium associated with a first communication connection; and

an allocation means for allocating said at least one echo cancellation unit to the first communication connection being supported by the switching center in response to detection, by the call classification means, of echo energy exceeding a selected magnitude from a first external transmission medium associated with said communication connection.

47. (New) The switching center of claim 46, wherein the allocation means is further operable to terminate allocation of the at least one echo cancellation unit to the first communication connection in response to detection of echo energy, from the first external transmission medium, failing to exceed a selected magnitude.

48. (New) The switching center of claim 47, wherein the call classification means is further operable to thereafter monitor the first communication connection, while the first local user device and remote user device are coupled to the first external transmission medium, for at least one of echo cancellation activity and echo energy and wherein the allocation means reallocates the at least one echo cancellation unit to the first communication connection in response to detection, by the call classification means, of echo energy exceeding a selected magnitude.

49. (New) The switching center of claim 46, wherein the allocation means is further operable to thereafter monitor the first communication connection, while the first local user device and remote user device are coupled to the first external transmission medium, for at least one of echo cancellation activity and echo energy and discontinue reallocation of the at least one echo cancellation unit to the first communication connection in response to detection of echo energy failing to exceed a selected magnitude.

50. (New) The switching center of claim 46, wherein the at least one echo cancellation unit is selected from a pool of echo cancellation units.